## WILDLIFE CONSERVATION

## THE RING-NECKED PHEASANT AND ITS MANAGEMENT IN NORTH AMERICA \*

This book, published in November 1945 by the American Wildlife Institute, Washington, D. C., presents the findings of a series of researches on pheasants conducted by seven land-grant colleges with the help of the respective state conservation departments and the supervision of the U. S. Fish and Wildlife Service. Michigan contributes an additional research conducted independently. In addition, there are chapters on classification and artificial propagation of pheasants.

The eight regional chapters differ greatly in viewpoint and technique. Some are casual surveys; others are based on ecological research of a high order. W. L. McAtee undertook the difficult editorial task of welding these diverse materials into a book. The result is better than might be expected of so heterogeneous a mixture of authorships and auspices.

The critically reasoned chapter on the pheasant in Ohio, by Daniel L. Leedy and Lawrence E. Hicks, excels the work from other states in both quality and volume. Every page, bristling with quantitative measurements in pheasant ecology, is a compressed summary of material that would ordinarily be reported as a separate paper. In fact, the main defect of the Ohio work is that its findings are so abundant that many of the detailed data and methods of analysis are omitted for lack of space.

The concept of game research in the agricultural colleges dates from the 1920's, when it first became clear that farm-game populations are controlled mainly by soil, farming practices, and farmers, rather than by game laws, game farms, and sportsmen. The Ohio pheasant study is a monumental elaboration of this concept. Not only are pheasant population levels shown to reflect the general pattern of soils and crops, but also to reflect such seemingly unimportant details as the speed of mowing machines, the selection of hay species, the date of last cultivation, the maintenance of fences and ditches, and the social organization of neighborhoods. We recall no equally thorough integration of wildlife ecology and land-use. Those readers who are not particularly interested in pheasants should be reminded that an equally intimate soil-farmer-animal relationship probably exists among numerous other birds and mammals, but remains to be explored.

With all its merits, this book presents certain defects which, if now clearly defined, may perhaps be avoided in the monographs on other game species now "in the mill" for future Wildlife Institute publication.

The most important is that none of the seven agricultural colleges looked further inside the pheasant than its crop or gizzard for explanations of its success or failure as a game bird. Their work was done during a decade when biochemistry and endocrinology were making spectacular advances in helping animal husbandry, poultry science, and medicine explain hitherto insoluble problems. Why did wildlife managers, quartered on the same campus, fail to seek similar help? In our opinion, the answer lies at least in part in an ill-advised mandate to be "practical," i.e. to choose lines of research whose results could be applied quickly to management problems. By and large the researches here reported are good to the extent that this mandate was disregarded or circumvented. (Ironically enough, the Fish and Wildlife Service is now justly proud of its very recent work on the vitamin nutrition of quail.† Encouragement of similar work in pheasants might have greatly enriched this volume.)

A second weakness is that the book is not up to date. The bibliography contains only one title later than 1942, and the argument shows unawareness of important recent publications, some comparable in quality with the Ohio study.

<sup>\*</sup> American Wildlife Institute, Washington, D.C., 1945:  $6\times8\%$  in., 320 pp., 31 pls. (2 col.), 12 figs. \$3.50.

<sup>†</sup> Nestler, Ralph B. Vitamin A, Vital Factor in the Survival of Bobwhite. Unpubl. MS read at Eleventh North American Wildlife Conference, New York, March 11, 1946.

Parts of the Michigan chapters were written a decade ago, and show it in out-

moded and unsupported assertions.

A third weakness is the authors' apparent unawareness of recent advances in the study of bird behavior. For example, it is now widely known that pheasants reared in captivity show a low survival rate where they are in competition with wild pheasants. Might this not arise from the imprinting of abnormal behavior patterns on juveniles while in confinement? Such a possibility is not mentioned, nor can we detect the idea anywhere in the book.

Again, what are we to think about the widely-alleged damaging competition offered to native game birds by pheasants? Errington (p. 198) is the only author who even suspects dominance phenomena. Several others dismiss the question

with the remark that no fights have been observed.

We, as readers, would have liked this book better if it offered a chapter summarizing the several regional studies. We would have liked the book better if more of its arguments ended with a flat "I don't know." We would have liked it better if somebody, a decade ago, had started pheasant research in the Dakotas—it does not speak well for "planning" that all pheasant research, until very recently, has been confined to habitats which, in comparison with Dakota, are more or less marginal.

As a piece of technical writing, the book is a monument to its editor. Its style is simple, direct, and uncluttered by "scientific jargon." Except for two color plates, the illustrations (31 plates and 12 figures) are good. It is too bad that the outlay for the color plates was not applied to Walter Weber's handsome painting, which is reproduced as an uncolored frontispiece.—Aldo Leopold and Robert A.

McCabe.

## Conservation News

The Wildlife Society Award for 1945 was made to the authors and editor of "The Ring-Necked Pheasant and Its Management in North America".

Ira N. Gabrielson, who retired this year as director of the U. S. Fish and Wildlife Service, has accepted the presidency of the Wildlife Restoration Institute, which is replacing the American Wildlife Institute. The new organization will carry on the former activities of the Wildlife Institute, including the sponsorship of the annual North American Wildlife Conference. In addition, it is establishing "a complete service and research organization better to correlate and advance the activities of cooperating agencies in the field of wildlife restoration and conservation."

Duck Hunting Unlimited. "During the fall season of 1943, 1,169,352 [duck stamps] were sold. In 1944, the number jumped to 1,487,029, an increase of about 27%. During the first six months of this fiscal year, which included the last hunting season, more stamps were sold than during all of the year before. In fact, on last December 31st, the duck stamp sales had reached the highest point in history, 1,540,468."—Albert M. Day, in an address to the Eleventh North American Wildlife Conference, March 12, 1946. Day thus presented what he called the "cold facts": "We have overshot our annual increase during the past two hunting seasons.—The population has declined in those two years.—The annual regulations provide the only quick means of adjusting hunting pressure to supply.—Marsh restoration and protection are highly important.—Mother Nature is the prime factor in production. . . . We can do much to improve wintering conditions.—Better public understanding is essential."

The Directors of the National Audubon Society recommended the following changes for the 1946–47 waterfowl hunting season:

1. Reduce the length of open season from 80 to 30 days.

2. Reduce the bag limit from 10 to 5 birds per day, with possession limit the same as the bag limit.

WILDLIFE CONSERVATION COMMITTEE Frederick N. Hamerstrom, Jr., Chairman